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EXAMINER
NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Office Action Summary	Application No. 09/472,602	Applicant(s) ALLARD ET AL.
		Examiner Chau Nguyen	Art Unit 2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2003* .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-13 and 15-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-13 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

1.   Amendment C, received on 10/17/2003, has been entered. Claims 1-3, 5-13, and 15-20 are presented for examination.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-3, 5-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sistanizadeh et al. (Sistanizadeh), Patent No. 6,101,182 and Driscoll et al. (Driscoll), Patent No., 6,577,627, and further in view of Beser, Patent No. 6,212,563.

4.   As to claim 1, Sistanizadeh discloses the invention as claimed, a broadband Internet Protocol (IP) based network, comprising:

at least one customer coupled to the network via a broadband multi service proxy server (BMPS) including a database and a router (Fig. 3, col. 5, lines 29-57: computers 316-324 coupled to BMPS (router 330, DNS server 332 and DHCP server 334); col. 9, line 61 – col. 10, line 6: a database located in DHCP server);

means for registering the at least one customer with a selected Internet Service Provider (ISP) for all IP services, prior to receiving the services (col. 10, line 25 – col. 11, line 5: DHCP server engages in an initial exchange with the customer to obtain the customer name and password based on the ISP desired);

means responsive to the ISP registration for storing in the database a customer identification, ID and password generated by the ISP (col. 10, line 25 – col. 11, line 5; and col. 10, lines 15-25: DHCP server engages in an initial exchange with the customer to obtain the customer name and password based on the ISP desired);

means for generating a DHCP message in a customer request for all IP services with the BMPS serving as a proxy (col. 9, line 61 – col. 10, line 6; and col. 10, lines 15-25: a computer broadcasts a DHCP request asking for an IP address from any DHCP server; Fig. 3, col. 5, lines 29-57: computers 316-324 coupled to BMPS (router 330, DNS server 332 and DHCP server 334));

means for receiving and routing the customer request for providing a unique customer address and IP services to the customer (col. 9, line 61 – col. 10, line 40: DHCP server receives the request, pulls an IP address from its database then sends it to the computer; issuing IP address is based on the customer's MAC address wihich is unique to the computer); and

means for mapping the unique customer address to the DHCP request (col. 9, line 61 – col. 40: a customer is connected to the desired ISP using a Login and Password mechanism whereby the DHCP server prompts a computer making an IP Request and issuing IP address is based on the customer's MAC address wihich is unique to the computer).

However, Sistanizadeh does not disclose an extended portion identifying the selected ISP and means for directing future customer request for and responses from all IP services directly to the selected ISP or any Internet service based on the updated routing tables. In the same field of endeavor, Driscoll discloses selecting an ISP 4 of choice by treating the standard IP packet as information, which is encapsulated within a larger packet prepended with a second header (extended portion) including the destination address of a particular ISP 4 (Abstract, and col. 3, lines 30-64). Driscoll also discloses packets sent from a source on the Internet to the user's terminal are directed to the user's ISP as defined in the network routing tables, which are updated dynamically (col. 3, line 65 – col. 4, line 9). Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Sistanizadeh and Driscoll to include an extended portion identifying the selected ISP and means for directing future customer request for and responses from all IP services directly to the selected ISP or any internet service based on the updated routing tables, since Driscoll suggests that using addition header (extended portion) which includes the destination address of a particular ISP to allow user to select an ISP of choice.

However, Sistanizadeh and Driscoll do not explicitly disclose a unique customer IP address and means mapping the unique customer IP address to the DHCP request. In the same field of endeavor, Beser discloses a system for allocating IP address for network devices using the DHCP for maintaining values of IP address according to the client identifier in the DHCP database, and when the DHCP client sends a DHCPREQUEST message to DHCP server, an IP address is assigned to the client (Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4). In addition, Beser discloses multiple DHCP proxies 15 (col. 6, lines 9-18). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Beser and Sistanizadeh and Driscoll to disclose a unique customer IP address and means mapping the unique customer IP address to the DHCP request in order to make the system more efficient.

5.   As to claim 2, Sistanizadeh, Driscoll, and Beser (Sistanizadeh-Driscoll-Beser) disclose the broadband network comprising:

modem means for coupling the customer to the network (Sistanizadeh, col. 6, lines 25-45: PC user connects to BMPS (router 330, DNS server 332 and DHCP server 334) via ADSL modem)); and

means for generating a unique customer IP ddress as part of the DHCP request (Sistanizadeh, col. 9, line 61 – col. 10: a customer is connected to the desired ISP using a Login and Password mechanism whereby the DHCP server prompts a computer

making an IP Request; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

6.   As to claim 3, Sistanizadeh-Driscoll-Beser disclose means for storing customer IP address information in the database (Sistanizadeh, col. 10, lines 15-60: DHCP server engages in an initial exchange with the customer to obtain the MAC address, the customer name and password; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

7.   As to claim 5, Sistanizadeh-Driscoll-Beser disclose routing means coupled to the BMPS for serving a plurality of ISPs (Sistanizadeh, col. 5, line 29 – col. 6, line 3: information providers (ISP) such as AOL and Compuserve are shown in Fig. 3 at 354 and 356 connected to the ISPs by T1 lines 358 and 360).

8.   As to claims 6 and 13, Sistanizadeh-Driscoll-Beser disclose a broadband multi service proxy server (BMPS), comprising:

        means coupling the server via a router to a broadband IP based network serving a plurality of customers (Sistanizadeh, Fig. 3, col. 5, lines 29-57: computers 316-324 coupled to BMPS (router 330, DNS server 332 and DHCP server 334); col. 9, line 61 – col. 10, line 6: a database located in DHCP server);

means coupling the server and the router to an IP network via at least one Internet Service Providers (ISP) in a plurality of ISPs, the server providing proxy services for the ISP (Sistanizadeh, col. 5, line 29 – col. 6, line 3 and Fig. 3);

means for generating a customer request including a DHCP message for access to the IP network (Sistanizadeh, col. 9, line 61 – col. 10, line 6; and col. 10, lines 15-25: a computer broadcasts a DHCP request asking for an IP address from any DHCP server), the extended DHCP message including an identification of a selected ISP for all ISP services (Driscoll, Abstract, and col. 3, lines 30-64);

ISP means for sending the server a unique customer IP address (Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4) in response to the extended DHCP message (Driscoll, Abstract, and col. 3, lines 30-64, col. 3, line 65 – col. 4, line 9);

means enabling the customer to access the selected ISP of choice for IP network services (Sistanizadeh, col. 13, lines 12-27); and

means for directing future customer requests for and responses from IP services directly to the selected ISP or any selected internet service after updating routing tables in the router (Driscoll discloses selecting an ISP 4 of choice by treating the standard IP packet as information, which is encapsulated within a larger packet prepended with a second header (extended portion) including the destination address of a particular ISP 4 (Abstract, and col. 3, lines 30-64). Driscoll also discloses packets sent from a source on the Internet to the user's terminal are directed to the user's ISP as defined in the network routing tables, which are updated dynamically (col. 3, line 65 – col. 4, line 9)).

means for mapping the unique customer IP address to the DHCP request (Sistanizadeh, col. 9, line 61 – col. 10: a customer is connected to the desired ISP using a Login and Password mechanism whereby the DHCP server prompts a computer making an IP Request; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

9.   As to claim 7, Sistanizadeh-Driscoll-Beser disclose means for storing the unique customer IP address in the server as an origination source for a customer request (Sistanizadeh, col. 9, line 61 – col. 10, line 6; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

10.   As to claim 8, Sistanizadeh-Driscoll-Beser disclose means for pre- registering a customer for IP service with an ISP prior to generating a customer request (Sistanizadeh, col. 10, lines 25-60; Driscoll, Abstract, and col. 3, lines 30-64); and

means for sending the server customer ID and password for customers registered by the ISP (Sistanizadeh, col. 10, lines 25-60) .

11.   As to claim 9, Sistanizadeh-Driscoll-Beser disclose means for sending a DHCP and unique customer IP address in a customer request for access to the IP network (Sistanizadeh, col. 9, line 61 – col. 10, line 6; and col. 10, lines 15-25: a computer broadcasts a DHCP request asking for an IP address from any DHCP server; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4);

means for receiving the customer request and storing the unique customer IP address in a database coupled to the server (Sistanizadeh, col. 9, line 61 – col. 10, line 6; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

12.   As to claim 10, Sistanizadeh-Driscoll-Beser disclose means for sending the server an extended DHCP response and customer assigned IP address for customer requests validated by the ISP (Driscoll discloses selecting an ISP 4 of choice by treating the standard IP packet as information, which is encapsulated within a larger packet prepended with a second header (extended portion) including the destination address of a particular ISP 4 (Abstract, and col. 3, lines 30-64). Driscoll also discloses packets sent from a source on the Internet to the user's terminal are directed to the user's ISP as defined in the network routing tables, which are updated dynamically (col. 3, line 65 – col. 4, line 9)).

13.   As to claim 11, Sistanizadeh-Driscoll-Beser disclose means for mapping validated customer requests to the unique customer IP address (Sistanizadeh, col. 10, lines 25-40; Beser, Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4); and

means emulating the ISP and sending the customer a DHCP response to the customer request (Sistanizadeh, col. 13, lines 12-27).

14.   As to claim 12, Sistanizadeh-Driscoll-Beser disclose means for validating a customer request for access to the IP network at the ISP of customer choice

(Sistanizadeh, col. 1, lines 8-15, col. 12, line 47 – col. 13, line 27, and Figs. 1, 8A, and

8B).

15.   As to claim 15, Sistanizadeh-Driscoll-Beser disclose emulating the ISP by the

server means and sending a DHCP reply to the customer followed by updating the

switching means to allow the customer to access the ISP of choice (Sistanizadeh, col.

13, lines 12-27; and Driscoll, Abstract, and col. 3, line 30 – col. 4, line 9).

16.   As to claim 16, Sistanizadeh-Driscoll-Beser disclose checking the extended

DHCP message by the ISP to determine if the customer is approved to receive IP

services (Sistanizadeh, col. 13, lines 36-56).

17.   As to claim 17, Sistanizadeh-Driscoll-Beser disclose notifying the server when

the ISP determines the customer is not approved to receive IP services (Sistanizadeh,

col. 11, lines 18-39).

18.   As to claim 18, Sistanizadeh-Driscoll-Beser disclose sending the server a

customer ID and password for customers registered by the ISP (Sistanizadeh, col. 10,

lines 15-24).

19.   As to claim 19, Sistanizadeh-Driscoll-Beser disclose sending the server extended

DHCP response and customer assigned IP address for customer requests validated by

the ISP (Sistanizadeh, col. 11, lines 18-39; Beser, Abstract, col. 2, lines 60-65 and col.

13, line 20 – col. 14, line 4).

20.   As to claim 20, Sistanizadeh-Driscoll-Beser disclose the unique customer IP

address expires upon customer log off (Sistanizadeh, col. 13, line 56 – col. 14, line 32).

Response to Arguments

21.   In the remarks, Applicant argued in substance that

(A) Prior art fails to disclose (a) a BMPS server whose functions are proxied by an ISP

which assigns IP addresses, (b) the ISP updating the routing tables of the BMPS, (c)

the BMPS emulates the ISP in providing the customer with a reply DHCP message, and

(d) preserves the sending and receiving addresses while establishing a message

session.

     As to point (A),

          (a) Applicant described in the specification on page 3, lines 17-18 "A

     Broadband Multi-service Proxy Server (BMPS) having a database containing

     customer service information is coupled to the router", and on page 11, lines 10-

     14 "the BMPS authorizes the customer modem and router for access to the ISP

     ". Sistanizadeh discloses DHCP server (considered as BMPS) engages in an

     initial exchange with the customer to obtain the customer name and password

(col. 9, line 59 – col. 10, line 40). Beser also discloses multiple DHCP proxies 15 (col. 6, lines 9-18 and col. 13, lines 20-37).

(b) Driscoll also discloses packets sent from a source on the Internet to the user's terminal are directed to the user's ISP as defined in the network routing tables, which are updated dynamically (col. 3, line 65 – col. 4, line 9).

(c) Sistanizadeh discloses in col. 9, line 61 – col. 10, line 6; and col. 10, lines 15-25: a computer broadcasts a DHCP request asking for an IP address from any DHCP server; Fig. 3, col. 5, lines 29-57: computers 316-324 coupled to BMPS (router 330, DNS server 332 and DHCP server 334).

(d) Sistanizadeh discloses in col. 9, line 61 – col. 10, line 6; and col. 10, lines 15-25: a computer broadcasts a DHCP request asking for an IP address from any DHCP server; Fig. 3, col. 5, lines 29-57: computers 316-324 coupled to BMPS (router 330, DNS server 332 and DHCP server 334).

(B) Prior art fails to disclose a DHCP/DNS server interacting with an ISP, as a proxy to register a customer.

As to point (B), Sistanizadeh discloses the ISPs have DNS and DHCP servers and are connected by an Inter-AS connection (col. 5, lines 49-57), and the DHCP server engages in an initial exchange with the customer to obtain the customer name and password (col. 10, lines 33-40).

(C) Prior art fails to disclose DHCP message including an extended portion.

As to point (C), Driscoll discloses selecting an ISP 4 of choice by treating the standard IP packet as information, which is encapsulated within a larger packet prepended with a second header (extended portion) including the destination address of a particular ISP 4 (Abstract, and col. 3, lines 30-64). Driscoll also discloses packets sent from a source on the Internet to the user's terminal are directed to the user's ISP as defined in the network routing tables, which are updated dynamically (col. 3, line 65 – col. 4, line 9).

(D) Prior art fails to disclose the ISP assigning a unique customer IP address.

As to point (D), Beser discloses a system for allocating IP address for network devices using the DHCP for maintaining values of IP address according to the client identifier in the DHCP database, and when the DHCP client sends a DHCPREQUEST message to DHCP server, an IP address is assigned to the client (Abstract, col. 2, lines 60-65 and col. 13, line 20 – col. 14, line 4).

(E) Prior art fails to disclose future customer messages traveling directly to the ISP and the BMPS serving as a proxy for the ISP.

As to point (E), Sistanizadeh discloses future user requests are directed to the DHCP/DNS server for processing selected ISP (col. 13, lines 12-27). Sistanizadeh discloses DHCP server (considered as BMPS) engages in an initial exchange with the customer to obtain the customer name and password (col. 9, line 59 – col. 10, line 40). Beser also discloses multiple DHCP proxies 15 (col. 6, lines 9-18 and col. 13, lines 20-

37). Driscoll discloses providing a method of selecting an ISP of choice within the packet switched access network (col. 3, line 30 – col. 4, line 9).

22.   Applicant's arguments and amendments filed on 10-17-2003 have been fully considered but they are not deemed fully persuasive. Applicant's arguments with respect to claims 1-3, 5-13, and 15-20 have been considered but are moot in view of the new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., the BMPS serving as a proxy and unique customer IP address) to the claims which significantly affected the scope thereof. Please see the rejection and reply to arguments above.

THIS ACTION IS MADE FINAL.   Applicant is reminded of the extension of time

policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.   In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.   In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chau Nguyen whose telephone number is (703) 305-

4639. The examiner can normally be reached at 8:00 am – 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 872-

9306. Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3230.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20131

Or Faxed to:

(703) 872-9306, (for **formal communications**; please mark

"EXPEDITE PROCEDURE").

Or:

(703) 746-7240 (for **informal or draft communications**, please label

"PROPOSED" or "DRAFT").

Or:

(703) 872-9306 (for **After Final Communications**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA., Sixth Floor (Receptionist).

Chau Nguyen
Patent Examiner
Art Unit 2176

SANJIV SHAH
PRIMARY EXAMINER